CLAIMS

We claim:

1. A method of treating a Pin-1 associated disorder in a subject comprising, administering to a subject an effective amount of a MSPCIT such that said Pin-1 associated disorder is treated.

2. The method of claim 1 wherein said MSPCIT covalently interacts with a serine.

3. The method of claim 1 wherein said MSPCIT covalently interacts with a cysteine.

4. The method of claim 2, wherein said MSPCIT forms a Michael adduct with serine-114.

5. The method of claim 3, wherein said MSPCIT forms a Michael adduct with cysteine-113.

6. The method of claim 3, wherein said MSPCIT forms a disulfide bond with cysteine-113.

7. A compound that specifically modulates the activity of Pin-1 by covalently interacting with cysteine-113 or serine-114 of the Pin-1 polypeptide.

8. The compound of claim 7 that further interacts with one of the regions of the Pin-1 polypeptide selected from the group consisting of the hydrophobic pocket, the substrate entry groove, the phosphate binding pocket, or the lip region.

9. A compound that is capable of a specific covalent interaction with an amino acid residue of the Pin1 active site.

10. The compound of claim 9 that further interacts with one of more of the following areas of the active site: the hydrophobic pocket, the cysteine/serine valley, the phosphate binding pocket, the substrate entry groove, and the lip region.